

Date: Sat, 23 Apr 94 04:30:31 PDT  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V94 #108  
To: Ham-Homebrew

Ham-Homebrew Digest                      Sat, 23 Apr 94                      Volume 94 : Issue 108

Today's Topics:

                    811A Tube availability?  
Comments on the new OHR "Classic" 20/40 meter QRP transceiver? (2 msgs)  
                    dtmf decoder chips- who makes a good one?  
                    Ethernet coax antenna feed? (2 msgs)  
                    POWER TRANSFORMER HELP NEEDED!!!  
                    QRP neswwsgroup  
                    Source for Piston Trimmer Caps ? (2 msgs)  
                    What can cause chirp in homebrew CW transmitter?

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>  
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 22 Apr 94 05:54:31 GMT  
From: agate!howland.reston.ans.net!usc!crash!nctams1!pnet16!  
tjenkins@ucbvax.berkeley.edu  
Subject: 811A Tube availability?  
To: ham-homebrew@ucsd.edu

Anyone have an idea as to where to obtain such tubes?

I've one that is glowing redder than the others :)

--Tom

INET: tjenkins@pnet16.navy.mil

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Date: Thu, 21 Apr 1994 14:21:24 GMT  
From: ihnp4.ucsd.edu!swrinde!gatech!birdie-blue.cis.pitt.edu!gvls1!  
rossi@network.ucsd.edu  
Subject: Comments on the new OHR "Classic" 20/40 meter QRP transceiver?  
To: ham-homebrew@ucsd.edu

Just got the latest OHR catalog and it shows their new 20 \*and\* 40 meter dual-band QRP transceiver. I talked to them on the phone and they claim it has similar performance to the "Sprit" transceiver but is dual-band. Looks pretty nice. Anyone out there build one yet? Comments?

Pete Rossi - WA3NNA                      rossi@vfl.paramax.COM

Unisys Corporation - Government Systems Group  
Valley Forge Engineering Center - Paoli, Pennsylvania

Date: Thu, 21 Apr 1994 14:24:43 GMT  
From: ihnp4.ucsd.edu!swrinde!gatech!birdie-blue.cis.pitt.edu!gvls1!  
rossi@network.ucsd.edu  
Subject: Comments on the new OHR "Classic" 20/40 meter QRP transceiver?  
To: ham-homebrew@ucsd.edu

Just got the latest OHR catalog and it shows their new 20 \*and\* 40 meter dual-band QRP transceiver. I talked to them on the phone and they claim it has similar performance to their "Sprit" transceiver but is dual-band.

Looks pretty nice. Anyone out there build one yet? Comments?

Pete Rossi - WA3NNA                      rossi@vfl.paramax.COM

Unisys Corporation - Government Systems Group  
Valley Forge Engineering Center - Paoli, Pennsylvania

Date: Wed, 20 Apr 1994 16:36:48 GMT  
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!utnut!utcsri!newsflash.concordia.ca!  
CC:UMontreal.CA!poly-vlsi!nick@network.ucsd.edu  
Subject: dtmf decoder chips- who makes a good one?  
To: ham-homebrew@ucsd.edu

In article <CoIyGI.3Fy@fore.com> ed@fore.com (Ed Bathgate) writes:

>I am wanting to build a circuit that decodes & responds to dtmf

>tones. I plan on using a microcontroller with parallel io.

>

Use a Mitel 8870. It is the standard of the telephone industry. It provides a 4 bit parallel out with a strobe that is perfect for what you want to do. It decodes all 16 DTMF tone pairs and costs about \$10 bucks. Good Luck, Nick

-----  
Date: Wed, 20 Apr 1994 22:55:26 GMT

From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!

kludge@network.ucsd.edu

Subject: Ethernet coax antenna feed?

To: ham-homebrew@ucsd.edu

In article <jbaker-180494145014@bellevue-ip16.halcyon.com> jbaker@halcyon.com (James Baker) writes:

>Does anyone have experience using IEEE 802.3 "thicknet" cable for antenna  
>feeds?

>

>I am thinking about using it for HF longwire antenna leadin from Balun. It  
>is bright yellow, 50 ohm, well sheilded (two foils and 2 braid layers), has  
>one 12 ga. solid center conductor, attaches easily to PL-239's. Plus I have  
>a bunch otherwise going to waste.

Works great. Extremely low loss, very rugged and handles being left outside better than most conventional cables. Be careful using old Ethernet lines, though, if they've got vampire tap holes left on them. At the very least, seal them up with RTV. Water will get into them and you will find interesting line problems.

--scott

--

"C'est un Nagra. C'est suisse, et tres, tres precis."

-----  
Date: Thu, 21 Apr 1994 17:00:15 GMT

From: ihnp4.ucsd.edu!swrinde!sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!  
news1.boi.hp.com!hp-pcd!hpcvsnz!tomb@network.ucsd.edu

Subject: Ethernet coax antenna feed?

To: ham-homebrew@ucsd.edu

Muenzler, Kevin (MUENZLERK@uthscsa.EDU) wrote:

: very good cable with low loss. However, if you will notice, probably  
: stamped on the side of the cable is "50 Volts MAX" or something like

: that. If you have any of the "standard" rigs on the market that will  
: put out 100 or so watts you will quickly burn through the cable  
: insulation. If the impedance of the

My impression is that the Thick-LAN cables that have this stamped  
on them have it as a safety/regulatory thing for use in the  
intended application, and that it has nothing to do with the  
actual ability of the cable to handle voltage. We often rate  
inputs to instruments at 40 volts maximum, not because that's  
the most they can stand but because to rate them higher would  
require jumping through all sorts of hoops, and higher voltage  
is really unnecessary in the application.

Does anyone out there have evidence to the contrary? Has anyone  
actually zapped some of it by running a few hundred watts at HF at  
reasonable SWR? (I \_know\_ there are folk out there using this stuff  
for transmitting...)

BTW, I have some which is not marked that way, and the catalog listing  
for it similarly is silent on voltage rating. In what way is the  
insulation \_so\_ different from that in rg8-type foam insulated cables,  
which may be rated for well over 1000 volts?

73, K7ITM

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Date: Wed, 20 Apr 1994 16:57:22  
From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!news1.oakland.edu!  
cms.cc.wayne.edu!pgarabed@network.ucsd.edu  
Subject: POWER TRANSFORMER HELP NEEDED!!!  
To: ham-homebrew@ucsd.edu

In article <1994Apr14.025531.17157@wmichgw> x90galbrait1@wmich.edu writes:

>From: x90galbrait1@wmich.edu  
>Subject: POWER TRANSFORMER HELP NEEDED!!!  
>Date: 14 Apr 94 02:55:30 EST

>Hello!

>I just picked up an old (early 70s) Bell & Howell tube-type scope.  
>It was cheap, but the power transformer is SHOT (it snap, crackles, and pops).  
>There is no manufacturer printed on it, but there is a model #.  
>I do not know what the secondaries are wound for, except there are twelve leads  
>coming out of the transformer (2 being the 117vac in).

>Is there somewhere I can get a replacement?  
>Is there someone who will rewind it?

>Any help would be returned by countless blessings!

This could be a big job.I've rewound transformers on occasion even a

high voltage type for a tube scope type.Is this a tube type scope?

Do you have a circuit diagram? You're gonna need it

>

73, Chris, KA8WFC

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Date: 23 Apr 94 04:51:29 GMT

From: dog.ee.lbl.gov!agate!howland.reston.ans.net!torn!govonca!

pepperb@ucbvax.berkeley.edu

Subject: QRP neswwwsgroup

To: ham-homebrew@ucsd.edu

Oh please, I think, I suspect, I know for sure (I believe) that there is  
QRP usenet/newsgroup for radi amateur qrp interests and building. Could  
anyone tell me what the rec. or whatever group is called (i.e.  
rec.radio.amateur.low-power ?) I am new, and my key word searches are not  
quite so great.

Thanks. Any info as to where to hang out for such things would be  
appreciated. I figured the homebrew area would know about such a closely  
associated thing as qrp.

73 de VE3VAW

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Date: 19 Apr 94 09:10:58 EDT

From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!zip.eecs.umich.edu!

yeshua.marcam.com!news.kei.com!ub!newserve!sarah!psinntp!psinntp!main03!

landisj@network.ucsd.edu

Subject: Source for Piston Trimmer Caps ?

To: ham-homebrew@ucsd.edu

In article <CoDn2x.3Fu@vectorbd.com>, jp11@vectorbd.com (Jim Lill) writes:

> HILLIER, MARK D. (md\_hill@pavo.concordia.ca) wrote:

> : Does anyone know where I can find a reliable supply of 1-10 pF piston trimmer

> : caps. I understand that All Electronics used to carry a Johanson part, but I

>

>

> Voltronics is another manufacturers as I recall....

>

Also check out Hamtronics (716-392-9430) They have a free catalog.

They sell a bag of 'em for abt \$5.

--

Joe Landis - System & Network Mgr. - North American Drager Co.  
landisj@drager.com | uupsi5!main03!landisj | AA3GN @ WB3JOE

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Date: 21 Apr 1994 13:09:39 GMT  
From: ihnp4.ucsd.edu!swrinde!gatech!udel!news.udel.edu!diusys.cms.udel.edu!  
dave@network.ucsd.edu  
Subject: Source for Piston Trimmer Caps ?  
To: ham-homebrew@ucsd.edu

HILLIER, MARK D. (md\_hill@pavo.concordia.ca) wrote:  
: Does anyone know where I can find a reliable supply of 1-10 pF piston trimmer  
: caps. I understand that All Electronics used to carry a Johanson part, but I  
: phoned and they no longer stock it.  
:  
Microwave Components of Michigan has Johanson and Trimtronix  
(313) 753-4581

73, Dave WA3U

-----  
Date: 22 Apr 94 16:14:52 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: What can cause chirp in homebrew CW transmitter?  
To: ham-homebrew@ucsd.edu

The cause of chirp in an xtal-controlled transmitter (or any crystal or most any oscillator, for that matter) can be traced to just a few things. 1) Component heating 2) Poor Voltage regulation 3) Poor load isolation 4) Temperature coefficients of other components.

I would guess that in the case of the 6L6 transmitter it is likely a combination of the first two. Too much crystal drive will heat the quartz element and cause a chirp. Slight adjustment of some of the tuned elements or feedback components around the xtal may help. I would guess that the 6L6 transmitter used an ECO (an electron-coupled oscillator - Too bad there isn't a solid-state equivalent:-( ) so that isn't likely to be a problem if the design is reasonable. So, the next most likely thing is poor regulation of plate and bias supplies. See if the power supply "droop" "follows" the chirp. You may also want to check the "stiffness" of some of the bias supplies. Overdrive could not only result in crystal heating, but in overdrive of the tube and making a bias supply being dragged around from changes in grid current.

I'll bet your power supply is wandering around...

As far as load isolation, there's not much that can be done about that with a single-tube-element transmitter. Also, that sort of problem generally doesn't cause "chirp" per se, but rather your frequency would vary slightly with tuning, antenna swinging, etc. The component temperature coefficient problem (not to be confused with component heating) is also a long-term stability problem. That is, over the course of a 10's of seconds or longer the frequency would move around...

As far as power supply regulation, you may consider the normal tricks to improve dynamic regulation (i.e. a heftier "bleeder" resistor, a more substantial power transformer (if it's under-rated under load, etc.) a choke-input (a henry or 3 would help...) etc...)

Anyway, that TX sounds neat. There's something fun about operating an open-breadboard single-tube TX on the bands today... Just keep your hands (and those of others) clear:-)

<Clint>

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End of Ham-Homebrew Digest V94 #108

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